

Title (en)
REFRIGERANT COMPOSITION

Title (de)
KÜHLMITTELZUSAMMENSETZUNG

Title (fr)
COMPOSITION DE REFRIGERANT

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Abstract (en)
[origin: WO2005042679A1] This invention describes a new refrigerant/lubricant combination for use in stationary and mobile refrigeration and air conditioning applications. In these applications, the refrigerant and lubricant must be soluble in each other (e.g., miscible) to ensure adequate lubricant circulation from the compressor, through the condenser, expansion device, and evaporator, and back to the compressor. Insufficient lubricant circulation will result in compressor failure. Low temperature solubility is particularly important to ensure lubricant flow through the cold evaporator. In addition, the lubricant and refrigerant combination should be stable in the presence of steel, and aluminum and copper containing metals. This invention describes the combination of refrigerant difluoroethane (R-152a) and polar, oxygenated lubricants, particular polyalkylene glycols (PAGs) and polyolesters (POEs) which may be used as a "drop-in" replacement for R-134a.

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